

SMARTOUCH™ STS COMPLETE CONTROL SYSTEMS



STS-C - SmarTouch™ Complete Control System Color Version

SmarTouch™ STS is Crestron's revolutionary wireless control system that offers unprecedented performance and value. SmarTouch is a user friendly, radio frequency (RF) control system that is easy to install. The complete SmarTouch system costs less than most touchpanels alone.

The SmarTouch system is flexible enough to be a perfect fit for small to medium sized applications. Designed for boardrooms, conference centers, home theaters and more, SmarTouch STS makes the convenience of a control system an option in more installations than ever before. This complete control package includes the ST-1550C color touchpanel, ST-DS docking station, ST-CP control processor, and ST-BTP battery pack.

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Radio Frequency (RF). 1-way; 434MHz Touchpanel Component ST-1550C wireless (RF) color LCD touchpanel included External, 12VDC, 1000mA AC adapter; included Control Processor Component (1) ST-CP Control Processor included Power Requirements External, 12VDC, 500mA AC adapter; included

Included......ST-1550C Touchpanel, ST-CP Control Processor, ST-DS Docking Station and (2) STIRP Infrared probes

MODEL OPTIONS:

All the features of the STS-C, with the following exceptions:

STSI-C......International version

Touchpanel Component:

Power Options..... External, 12VDC, 1000mA AC adapter (220VAC compatible); included

Control Processor Component:

Power Requirements External, 12VDC, 1000mA AC adapter (220VAC compatible); included



STS – SmarTouch™ Complete Control System **Grayscale Version**

This complete control package includes the ST-1550 grayscale touchpanel, ST-DS docking station, ST-CP control processor, and ST-BTP battery pack.

Touchpanel Component ST-1550 wireless (RF) grayscale LCD touchpanel included External, 12VDC, 1000mA AC adapter; included

Control Processor Component (1) ST-CP Control Processor included Power Requirements External, 12VDC, 500mA AC adapter; included

Included......ST-1550 Touchpanel, ST-CP Control Processor, ST-DS Docking Station

and (2) STIRP Infrared probes

MODEL OPTIONS:

All the features of the STS, with the following exceptions:

STSI International version

Touchpanel Component:

Power Options..... External, 12VDC, 1000mA AC adapter (220VAC compatible); included

Control Processor Component:

Power Requirements External, 12VDC, 1000mA AC adapter (220VAC compatible); included



SMARTOUCH STS CONTROL PROCESSORS



ST-CP - SmarTouch Control Processor

The ST-CP is the control processor portion of the SmarTouch system. The ST-CP may be purchased separately for use in multiple rooms being controlled with one or many touchpanels without re-wiring. The ST-CP is an integrated stand alone control system capable of supporting any Cresnet device, touchpanels, etc. in an economical, compact package.

Communications	Radio Frequency (RF); 1-way; 434MHz
Communications Ports:	
RF	(1) 50 ohms BNC connector; for use with antenna (included) alone or with standard 50 ohm extension cable (not included)
NET	(1) 6-wire RJ-type connector; for expansion to SmarTouch peripherals, Cresnet devices, touchpanels and for programming the SmarTouch touchpanel
	(1) 6-wire RJ-type connector for communicating to a PC computer when programming
	(2) 6-wire RJ-type connectors for controlling audio/visual devices via independent RS-232 ports (data rate up to 38,400 baud)
IR OUT A – D	(4) RA, 3.5mm mini phone jacks for controlling additional audio/visual devices via IR, serial format; requires STIRP IR probe(s). The IR port can be used with TTL compatible serial interfaces/devices
LED Indicators:	The int port out to asou with the compatible solid interfaces, devices
PWR	Indicates 12 or 24VDC power supplied to unit
NET	Indicates command activity to Cresnet and SmarTouch peripherals or from PC
RF	Indicates commands received from user interface (i.e., touchpanel)
ERROR	Indicates programming problem
COM A – B	Indicates communications occurring from unit's COM ports
IR A – D	Indicates commands transmitted from unit's IR ports
Power Requirements	External, 12VDC, 500mA AC adapter; included
Enclosure	Black metal; stackable
Rack Mountable	With ST-RMK rack mount kit, not included
Dimensions (HxWxD)	1 rack unit high, 1/2 rack unit wide 1.70" (4.32cm) x 7.07" (17.95cm) x 6.32" (16.06cm)
Weight	2.0lbs (0.95Kg)
MODEL OPTIONS:	

All the features of the ST-CP, with the following exceptions: **STI-CP** International version

Power Options External, 12VDC, 1000mA AC adapter (220VAC compatible), included



SMARTOUCH STS EXPANSION MODULES

SmarTouch STS expansion modules allow the addition of devices and control features, such as current sensing, to a SmarTouch system. Expansion is easy; up to (252) SmarTouch modules can be connected through the modules' network ports and are fully functional with any Cresnet system. The modules are located near the controlled devices and are connected to the Cresnet network up to 5000' away. All STS Expansion Modules are also completely compatible with all Crestron CNX control systems.



ST-CS - Dual Current Sensor Module

The ST-CS provides power sensing to two individual 110/220V devices with a total power capacity of 10A. ST-CS gives discrete power on/off control for (IR) devices such as VCRs, DVD players and video projectors. The ST-CS guarantees that your controlled device is on when you want it on.

Communications Port:	
NET	(2) 6-wire RJ-type connectors for connection to the SmarTouch STS system, the Cresnet control system or additional modules
Connectors:	
DOMED A D	(2) 2

POWER IN(1) 3-prong plug on end of (approx. 6'/1.83m) cord; attached

NET Indicates command activity between unit and SmarTouch STS system

or between unit and Cresnet control system

FULL (POWER A – B) Indicates full load threshold exceeded (threshold is user-adjustable) PARTIAL (POWER A – B) Indicates partial load threshold exceeded (also user-adjustable)

Power:

Requirements 12 or 24VDC

Options External, 12VDC, 500mA AC adapter; included. 24VDC network power

Cresnet Power Factor......3.0W

Dimensions (HxWxD) 1 rack unit high, 1/2 rack unit wide 1.70" (4.32cm) x 7.07" (17.95cm) x 6.32" (16.06cm)

Weight 2.8lbs (1.3Kg)

MODEL OPTIONS:

All the features of the ST-CS, with the following exceptions:

STI-CS......International version

POWER A – B ports (2) international power cords (approx.6') connected to unit Power Options External, 12VDC, 1000mA AC adapter (220VAC compatible); included



SMARTOUCH STS EXPANSION MODULES continued



ST-IO - Input/Output Module

The ST-IO provides eight relay outputs and four digital/voltage inputs. The (8) relays take care of control to low voltage contact closure devices such as lights, screens, drapes and AV switchers. The (4) digital inputs take a contact closure signal or an analog voltage and turn it into a command.

Communications Po

system or the Cresnet control system DIGITAL IN 1, 2, 3, 4 & G......... (1) 5-pin connector used to detect digital input levels or analog input levels RELAY OUTPUT 1 – 8 (1) 16-pin connector provides (8) relay contact pairs LED Indicators: PWR Indicates 12 or 24VDC power supplied to unit NET...... Indicates command activity between unit and SmarTouch STS system or between unit and Cresnet control system INPUT 1 – 4..... Indicates signal to respective digital input is 'logic 1' RELAY 1 – 8..... Indicate respective relay is closed Closure mode: 2.0VDC (+/- 0.5) Input Voltage Range Voltage mode: 0 to +24 VDC Closure mode: Not applicable Input Impedance Voltage mode: 44K ohms to ground Closure mode: 1K to +5VDC Max. Rating per Relay 1A, 30V AC or DC; 100µA, 100mV minimum Power: Requirements 12 or 24VDC Options External, 12VDC, 500mA AC adapter, included; 24VDC network power Cresnet Power Factor.......6.0W Enclosure Black metal; stackable Rack Mountable With ST-RMK rack mount kit Dimensions (HxWxD) 1 rack unit high, 1/2 rack unit wide 1.70" (4.32cm) x 7.07" (17.948cm) x 6.32" (16.06cm) Weight 2.2lbs (1.0Kg)

MODEL OPTIONS:

All the features of the ST-IO, with the following exceptions: STI-IO (International version)

Power Options External, 12VDC, 1000mA AC adapter (220VAC compatible), included

SMARTOUCH STS EXPANSION MODULES continued



ST-VC - Volume Control Module

The ST-VC is a digitally controlled 3-channel audio attenuator. Each channel has independent settings for volume, treble, bass and mute. ST-VC is ideally suited to provide full audio control for systems without an IR- controlled integrated receiver. Choose your mixer, preamp and amplifier, then add an ST-VC module to complete the system. In some applications ST-VC's separate control of treble and bass may even eliminate the need for a graphic equalizer.

Communications Ports:

NET (2) 6-wire RJ-type connectors for connection to the SmarTouch STS

system or the Cresnet control system

CHANNELS A – C Balanced/unbalanced IN ports connect to any device needing

volume/tone control; balanced/unbalanced OUT ports connect

to amplifier

LED Indicators:

PWR Indicates 12 or 24VDC power supplied to unit

NET...... Indicates command activity between unit and SmarTouch STS system

or between unit and Cresnet control system

V and T..... Indicates Volume (V) or Tone (T) activity on any channel (A, B, C)

Power:

Requirements 12 or 24VDC

Options External, 12VDC, 500mA AC adapter; included. 24VDC network power

Cresnet Power Factor........6.0W

Volume (per channel):

Hum and Noise................(ref. ODbv) -85dB
Max. Input Level(Flat mode) 4V rms

Channel Separation -90dB

Attenuation Range. (excluding Mute) 0 to -76dB (max.)

Mute.....-104dB

Frequency Response 8Hz to 60KHz (-3dB minimum)

Tone (per channel):

Flatness (8 to 60KHz flat mode) +/- 0.2dB

Rack Mountable With ST-RMK rack mount kit

Dimensions (HxWxD) 1.70" (4.32cm) x 7.07" (17.95cm) x 6.32" (16.06cm)

Weight 2.2lbs (1.0Kg)

MODEL OPTIONS:

All the features of the ST-VC, with the following exceptions: **STI-VC** (International version)

Power Options External, 12VDC, 1000mA AC adapter (220VAC compatible); included



SMARTOUCH STS EXPANSION MODULES continued



ST-LT - Lutron® Interface Module

The ST-LT provides a direct Cresnet interface to Lutron's GRAFIK EYE ™ system. An additional RS-232 port is also included for interfacing to a PC running Lutron® control software. No additional interfaces are needed. ST-LT plugs directly into Lutron Mux Link, making the Lutron connection a snap!

Communications:

COMMINICATIONS.	
NET	(2) 6-wire RJ-type connectors; for connection to the SmarTouch STS system or the Cresnet control system
RS-232	(1) 9-Pin DB9 connector; Lutron-compatible; connects to PC running Lutron control software; equivalent to Lutron's GRX-AV-RS232 input
LUTRON MUX LINK	(1) 4-pin connector connects to Lutron Mux Link network
LED Indicators:	
PWR	Indicates 12 or 24VDC power supplied to unit
NET	Indicates command activity between unit and SmarTouch STS system or between unit and Cresnet control system
CRESTRON SND	Indicates command sent from unit to Lutron Mux Link network
CRESTRON RCV	Indicates command sent to unit from Lutron Mux Link network
LUTRON CMD	Indicates command sent from Cresnet control system to Lutron Mux Link network
LUTRON POLL	Indicates Lutron Mux Link network polling
LUTRON PWR	Indicates voltage supplied from Lutron Mux Link network
Power:	•
Requirements	
Options	External, 12VDC, 500mA AC adapter; included 24VDC network power
Cresnet Power Factor	'
Enclosure	
Rack Mountable	
	1 rack unit high, 1/2 rack unit wide
DITTICTISIONS (HAWAD)	1.70" (4.32cm) x 7.07" (17.95cm) x 6.32" (16.06cm)
Weight	, , , , , , , , , , , , , , , , , , , ,

MODEL OPTIONS:

All the features of the ST-LT, with the following exceptions: STI-LT (International version)

Power Options External, 12VDC, 1000mA AC adapter (220VAC compatible); included

SMARTOUCH STS EXPANSION MODULES continued



ST-COM - RS-232/422 COM Module

The ST-COM provides (2) independent bidirectional serial ports that support RS-232/422-based communication. ST-COM lets you add control for additional serial devices such as video projectors, AV switchers or other devices.

Communications:

LED Indicators:

PWR Indicates 12 or 24VDC power supplied to unit

NET...... Indicates command activity between unit and SmarTouch STS system

or between unit and Cresnet control system

RXD (COM A/B).....Indicates reception of data from serial devices attached

to respective COM ports

TXD (COM A/B)..... Indicates transmission of data to serial devices attached

to respective COM ports

RTS (COM A/B) Indicates when unit is ready to receive data (handshaking) from serial

devices attached to respective COM ports

CTS (COM A/B) Indicates when serial device, on the respective COM port, is ready

to accept data (handshaking) from the unit

Power:

Requirements 12 or 24VDC

Options External, 12VDC, 500mA AC adapter; included

24VDC network power

Cresnet Power Factor......2.5W

Enclosure ... Black metal; stackable
Rack Mountable ... With ST-RMK rack mount kit
Dimensions (HxWxD) ... 1 rack unit high, 1/2 rack unit wide

1.70" (4.32cm) x 7.07" (17.95cm) x 6.32" (16.06cm)

Weight 2.0lbs (0.9Kg)

MODEL OPTIONS:

Power Options External, 12VDC, 1000mA AC adapter (220VAC compatible); included



SMARTOUCH STS EXPANSION MODULES continued



ST-VS - Video Sync Sensor Module

The ST-VS is used to detect the presence of a video signal coming out of the baseband video port (typically the yellow RCA output jack on an A/V device) for up to four independent sources (ie. VCRs or TVs).

Power:

Cresnet Power Factor......3W

Communications Ports:

NET......(2) 6-wire RJ-type connectors for connection to the SmarTouch STS

System or the Cresnet control system

sources that require sensing

LED Indicators:

PWR Indicates 12 or 24VDC power supplied to unit

NET...... Indicates command activity between unit and SmarTouch STS system

or between unit and Cresnet control system

VIDEO 1-4 Indicates a video signal on the respective VIDEO connector exceeds the

minimum requirements for signal detection

Power:

Requirements 12 or 24VDC

Options External, 12VDC, 500mA AC adapter, included; 24VDC network power

Cresnet Power Factor......3W

Enclosure Black metal; stackable Rack Mountable With ST-RMK rack mount kit

1.70" (4.32cm) x 7.07" (17.95cm) x 6.32" (16.06cm)

Weight 1.92lbs (0.87Kg)

MODEL OPTIONS:

All the features of the ST-VS, with the following exceptions: STI-VS (International version)

Power Options External, 12VDC, 1000mA AC adapter (220VAC compatible), included

SMARTOUCH STS EXPANSION MODULES continued



ST-PC - Power Control Module

The ST-PC provides (2) switchable AC outlets. Use it to remotely turn on/off rack power or control AV devices that have a "hard" ON/OFF switch.

Connectors:

NET......(2) 6-wire RJ-type connectors; for connection to the SmarTouch STS

control system or to the Cresnet control system

POWER A / POWER B.......... (2) 3-prong socket connector; for connection to any device needing its

ON/OFF AC power controlled

Push Buttons:

POWER A / POWER B......(2) momentary switches; when control system is inactive, switch

toggles between two states; when control system is active, switch is

under program control

I.ED Indicators:

PWR Indicates 12 or 24VDC power supplied to unit

NET Indicates command activity between unit and SmarTouch STS system

or between unit and Cresnet control system

POWER A, POWER B..... Indicates that a controlled device plugged into respective 3-prong

socket is ON

Power:

Requirements 12 or 24VDC

Options External, 12VDC, 500mA AC adapter; included. 24VDC network power

Cresnet Power Factor.....4.0W

Total Combined Unit Load Not greater than 10A Rack Mountable With ST-RMK rack mount kit

Dimensions (HxWxD) 1.70" (4.32cm) x 7.07" (17.95cm) x 6.32" (16.06cm)

 $Weight \dots 2.7 lbs \ (1.15 K\underline{q})$

MODEL OPTIONS:

All the features of the ST-PC, with the following exceptions:

STI-PC (International version)

POWER A, POWER B......(2) international power cords (approx. 6') connected to unit

Power Options External, 12VDC, 1000mA AC adapter (220VAC compatible); included

Rating (per relay) 250VDC, 5A Tungsten Load

Weight 2.8lbs (1.30Kg)



SMARTOUCH STS ACCESSORIES



ST-DS - Docking Station/Charger

The ST-DS is a microprocessor based docking station for the ST-1550, ST-1550C and STX-1550C wireless touchpanels. The ST-DS can charge the ST-BTP in 2 hours.

PortLED Indicators:	DC power socket connector, used to supply power via external power pack
	Cross LED illuminates when newer is provided to the CT DS via the
External Power	Green LED illuminates when power is provided to the ST-DS via the specified external power pack
CHG (Charge)	Red LED illuminates when the ST-BTP is inserted into the ST-DS battery cavity and remains ON while the battery is charging. If the CHG LED blinks every second, it is in a "charge pending" state. When fast charging, the LED will remain ON
RDY (Ready)	Red LED illuminates when the ST-BTP in the ST-DS battery cavity is fully charged
Power	External power pack (Crestron PW-1215)
Connectors	DC power socket connector used to supply power via the recommended external power pack
Dimensions (HxWxD)	6.76" (17.18cm) x 6.72" (17.06cm) x 0.94" (2.38cm)
Weight	1.01lbs (0.46Kg)
MODEL OPTIONS:	
AU 6	6.11

Connectors:

All the features of the ST-DS with the following exceptions: **STI-DS** International version, 220V

For Models STI-1550, STI-1550C, STXI-1550C. Uses PWI-1215 power pack



ST-BTP Rechargeable Power Pack

This high-performance rechargeable power pack is designed to power the ST-1550, ST-1550C, STX-1550C and STX-1550CW wireless touchpanels. The unique design of the ST-BTP prevents it from being installed improperly, as it fits only one way into the battery compartment of the touchpanel.

Type Removable, rechargeable NiCad Dimensions (HxWxD) 1.16" (2.94cm) x 4.25" (10.78cm) x 2.28" (5.79cm)



ST-CNB – SmarTouch / Cresnet Terminal Expander

The ST-CNB converts the SmarTouch 6-wire RJ-type connectors to the 4-pin screw terminal connectors used on all Cresnet control network products. This conversion facilitates wiring for connecting SmarTouch expansion modules to the Cresnet control network.

	. (2) 4-pin Cresnet connectors; for expansion to network devices . (4) SmarTouch STS 6-wire RJ-type connectors; for expansion to SmarTouch peripherals
LED Indicators:	
PWR	. Indicates 24VDC supplied to one line
Enclosure	. Black metal; (3) screw holes each in two metal 'feet; for added stability
Dimensions (HxWxD)	. 1.970" (5.00cm) x 4.25" (10.80cm) x 1.16" (2.95cm)
Weight	. 0.45lbs (0.2Kg)

SMARTOUCH STS ACCESSORIES continued



STIRP - Infrared (IR) Probe

One end of the STIRP attaches to the (IR) window of the controlled device; the other end plugs into one of four IR OUT ports on the back of the ST-CP control processor or ST-SPL Infrared Splitter on the SmarTouch STS control system.

Length	. 10' (3.05m) total
Accessories (included)	. (1) piece double-backed tape; (1) opaque filter; window mask

Weight 0.08lbs (0.04Kg)



ST-MB - "Master Blaster" Infrared (IR) Sprayer

The ST-MB sprays an IR signal, allowing more than one IR-controlled device to be controlled from a single IR OUT port on the ST-CP, CN-TVAV or CEN-TVAV control processor. The ST-MB consists of (2) components: a sprayer interconnect box and an emitter assembly.

Connectors:

IR OUT	3.5mm mini phone jack; for connection to emitter component
IR IN	3.5mm mini phone jack; for connection to ST-CP control processor or to
	ST-SPL Infrared Splitter

to IR-OUT connector on interconnect box

LED Indicators (on interconnect box):

PWR Indicates 12VDC power supplied to unit IR-IN Indicates that unit is receiving an (IR) signal

LED Indicators (on emitter):

Emitter LED Indicates that ST-MB has output an (IR) signal

Power:

Requirements 12 or 24VDC

Options External, 12VDC, 500mA adapter; included or 24VDC network power

Enclosure (interconnect box): Black metal with (6) screw holes in two metal 'feet'

Enclosure (emitter): Black metal and plastic face

Dimensions (interconnect box):.....1.97"/5.00cm (H) x 3.25"/8.26cm (W) x 1.16"/2.95cm (D) Dimensions (HxWxD) (emitter):.....1.05"/2.67cm (H) x 1.13"/2.86cm (W) x 6.00"/15.24cm (D)

Weight (total) 0.45lbs (0.2Kg)

MODEL OPTIONS:

All the features of the ST-MB, with the following exceptions:

STI-MB.....(International version)

Power Options External, 12VDC, 1000mA adapter (220VAC compatible), included



SMARTOUCH STS ACCESSORIES continued



ST-SPL - Infrared (IR) Splitter

The ST-SPL splits one infrared (IR) port of an ST-CP, CN-TVAV or CEN-TVAV control processor into (5) ports, allowing control of up to (5) devices via multiple STIRP Infrared Probes.

Connectors:	
OUT	. (5) RA, 3.5mm mini phone jack; for connection to any combination of STIRP Infrared Probes or ST-MB 'Master Blaster' Infrared Sprayers
IN	. (1) RA, 3.5mm mini phone jack; connects to IR OUT port on ST-CP using 6° cable; included
Enclosure	. Black metal with (6) screw holes in two metal 'feet'
Dimensions (HxWxD)	. 1.97" (5.00cm) x 3.25" (8.26cm) x 1.16" (2.95cm)
Weight	. 0.35lbs (0.15Kg)



ST-PK - Programming Kit

The ST-PK includes cables, connectors and Crestron's Windows-based VisionTools™ for Windows software, which includes SmarTouch™ Wizard and ST ProEditor software.

Software	restron VisionTools™ for Windows , latest version
Cables:	
Touchpanels to ST-CP U PC to ST-CP	01 0 0 3
Adapters:	
RJ11 to DB9FU	lsed during programming only

ST-RMK - Rack Mount Kit

The ST-RMK allows rack-mounting of one or two SmarTouch STS Expansion Modules and/or ST-CP control processor.

Components (included)	(1) rack mount tray; (1) front plate and bracket (to cover open gap if
	only one module is mounted)
Construction	Black steel
Dimensions (HxWxD)	1.70" (4.32cm) x 19.00" (48.26cm) x 5.02" (12.74cm); occupies 1 rack unit
Weight	2.4lbs (1.1Kg)



SMARTOUCH STS ACCESSORIES continued

ST-112 - Sony® Control-S Cable

The ST-112 is designed from the SmarTouch STS system, and is used specifically to control Sony Ctrl-S devices.

end plugs into the Control S port of any Sony Ctrl-S device)

STCP-501 – Interface Cable

Adaptor Cable for ST-CP COM Port to any CNSP-XX RS-232 cable

Connectors: COM RJ11 Length 1.0' (30.5cm)

ST-XX - Custom Serial Interface Cable

Adaptor cable for ST-CP COM Port to to RS-232 port of controlled device

Connectors: COM RJ11 RS-232 custom pinout and connector for controlled device

